

LISTING OF CLAIMS

Claims 1-3. **(cancelled)**

4. **(previously presented)** A sewage grinder pump comprising:
a motor housing;
a pump housing, having an inlet communicated to a first stage volute, a discharge of the first stage volute communicated through an inter-stage conduit to an inlet of a second stage volute and a discharge of the second stage volute communicated to an outlet;
a motor enclosed within the motor housing, the motor having a shaft extending therefrom into the pump housing;
a centrifugal impeller positioned in the first stage volute;
a centrifugal impeller positioned in the second stage volute, each of the centrifugal impellers being attached to the motor shaft; and
a grinder positioned in the pump housing inlet and attached to the motor shaft, the grinder and the centrifugal impellers having a common axis of rotation inside the pump housing.
5. **(original)** The sewage grinder pump according to claim 4, wherein the motor shaft extends vertically.
6. **(previously presented)** The sewage grinder pump according to claim 4, wherein the first and second stage centrifugal impellers are positioned along the motor shaft between the motor and the grinder.
7. **(previously presented)** The sewage grinder pump according to claim 4, wherein at least one of the centrifugal impellers is a vortex impeller.

Claims 8-9. **(cancelled)**

10. **(previously presented)** The sewage grinder pump according to claim 4, wherein the grinder further comprises a means for throttling inlet flow.

Claims 11-13. **(cancelled)**

14. **(previously presented)** The sewage grinder pump according to claim 4, further comprising a discharge conduit monolithic with the motor housing and communicated to the pump housing outlet.

15. **(previously presented)** The sewage grinder pump according to claim 14, wherein the discharge conduit has an anti-siphon valve integral therewith, the anti-siphon valve comprising a valve seat and a movable valve element.

16. **(previously presented)** The sewage grinder pump according to claim 15, wherein the anti-siphon valve further comprises a means for bleeding fluid.

17. **(previously presented)** The sewage grinder pump according to claim 15, wherein the anti-siphon valve further comprises a stop, the stop being positioned between the movable valve element and the interior of the discharge conduit.

18. **(previously presented)** The sewage grinder pump according to claim 15, wherein the movable valve element lies in a plane that is inclined from vertical.

19. **(previously presented)** The sewage grinder pump according to claim 14, further comprising:

a discharge flange attached to the motor housing, the discharge flange in fluid communication with the discharge conduit; and
a check valve integral with the discharge flange.

20. **(original)** The sewage grinder pump according to claim 19, wherein the discharge flange has a lift handle monolithic therewith.

21. **(previously presented)** A method for grinding and pumping sewage comprising:
providing the sewage grinder pump of claim 4;
operating the motor to rotate the attached impellers and grinder;
introducing sewage into the pump housing inlet;
rotating the grinder in the pump housing inlet to grind any solids contained in the sewage;
passing the ground sewage into the first stage volute;
rotating the first stage impeller to increase the pressure of the ground sewage;
passing the ground and pressurized sewage from the first stage volute into the second stage volute;
rotating the second stage impeller to further increase the pressure of the ground and pressurized sewage; and
discharging the ground and twice-pressurized sewage through the pump housing outlet.

22. **(previously presented)** The method according to claim 21, wherein the step of discharging the ground and twice-pressurized sewage comprises discharging the ground and twice-pressurized sewage through a discharge conduit that is monolithic with the motor housing.

23. **(previously presented)** The method according to claim 22, further comprising the step of relieving vacuum within the discharge conduit through an anti-siphon valve that is integral with the discharge conduit.

24. **(previously presented)** The method according to claim 22, wherein the step of discharging the ground and twice-pressurized sewage includes preventing back flow into the discharge conduit with a check valve that is integral with a discharge flange attached to the discharge conduit.

25. **(previously presented)** The method according to claim 21, wherein the step of providing the sewage grinder pump comprises providing a motor of about 2 horsepower and the step of operating the motor comprises rotating the motor and attached impellers to produce at least about 200 feet head at zero flow and at least about 30 gallons per minute maximum flow.

26. **(previously presented)** The method according to claim 21, wherein the step of providing the sewage grinder pump comprises attaching the second stage impeller to the shaft proximate the motor, attaching the first stage impeller to the shaft proximate the second stage impeller, and attaching the grinder to the shaft proximate the first stage impeller.

Claims 27-53. **(cancelled)**

54. **(new)** A sewage grinder pump comprising:
a motor housing;
a motor, enclosed within the motor housing, a shaft of the motor extending from an end of the motor housing;

a pump housing, mounted on the end of the motor housing such that the motor shaft extends into the pump housing, which comprises:

an inlet;

a first stage volute with an inlet and an discharge, the first stage volute inlet communicated to the inlet;

an interstage conduit with an inlet and an outlet, the interstage conduit inlet communicated to the first stage volute discharge;

a second stage volute with an inlet and a discharge, the second stage volute inlet communicated to the interstage conduit outlet; and

an outlet, the outlet communicated to second stage volute discharge;

a first centrifugal impeller positioned on the motor shaft in the first stage volute;

and

a second centrifugal impeller positioned on the motor shaft in the second stage volute,

wherein the centrifugal impellers have a common axis of rotation inside the pump housing.